Remarks

In the foregoing claim amendments, claims 1, 16 and 21 have been amended. Pending in the application are claims 1-25, of which claims 1, 16 and 21 are independent. The following comments address all stated grounds for rejection and place the presently pending claims, as identified above, in condition for allowance.

Claim Amendments

Applicant has amended claims 1, 16 and 21 to clarify the scope of the claimed invention. In particular, claim 1 has been amended to recite the steps of after recovery of the fault, releasing the links on the backup path, and adjusting the attributes for the released links along the backup path. Claims 16 and 21 have also been amended to recite like limitations. Support for the claim amendments can be found at page 12, line 26 through page 15, line 7 in the specification of the pending application. No new matter has been introduced.

Rejection of Claims 1-4, 12, 14-22 and 24 under 35 U.S.C. §102

Claim 1-4, 12, 14-22 and 24 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2002/0097671 ("Doverspike"). Applicant respectfully traverses the rejection for the following reasons.

Independent claim 1 is directed to a method for mesh restoration for an optical network with a plurality of nodes and a plurality of links. In the method of claimed invention, a backup path is activated for a working path in response to a fault along a working path. After the recovery of the fault, the links on the backup path are released and the attributes for the released links are adjusted along the backup path so that the released links are made available for other backup paths. Independent claims 16 and 21 recite like limitations. Claims 2-4, 12, 14-15, 17-20, 22 and 24 depend upon one of independent claims 1, 16 and 21.

Applicant submits that Doverspike does not disclose the steps of *after recovery of the fault, releasing the links on the backup path, and adjusting the attributes for the released links along the backup path,* as recited in claims 1, 16 and 21.

Doverspike discloses a method for selecting a restoration path in a mesh network, which can be pre-computed along with a service connection path during the setup of the connection. Doverspike also discloses that the information used to select the restoration path can be distributed among nodes in the network.

Although Doverspike discloses a method for selecting a restoration path in a mesh network, Doverspike does not discuss processes after the recovery of a failure in the network. In comparison, the claimed invention reverts to the working path and releases the links on the backup path after the recovery of a fault on the working path. The claimed invention also adjusts the attributes of the released links on the backup path so the released links can be made available for other backup paths. Doverspike, however, does not disclose releasing the links on the restoration path after the recovery of the failure in the network, and adjusting the attributes of the released links on the restoration path.

In light of the foregoing claim amendments and arguments, Applicant submits that Doverspike _fails_ to disclose each and every element of claims 1, 16 and 21. Applicant therefore requests the Examiner to reconsider and withdraw the rejection of claims 1-4, 12, 14-22 and 24 under 35 U.S.C. § 102(e), and pass the claim to allowance.

Rejection of Claims 5-11 under 35 U.S.C. § 103

Claims 5-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0097671 ("Doverspike"). Applicant respectfully traverses the rejection for the following reasons.

Claim 5-11 depend upon claim 1 and add further limitations to claim 1.

Applicant submits that Doverspike does _not_ teach or suggest the steps of _after recovery of the fault, releasing the links on the backup path, and adjusting the attributes for the released links along the backup path_, as recited in claim 1. Doverspike teaches at best a method for selecting a restoration path in a mesh network. Doverspike, however, does not teach releasing links on the restoration path after the recovery of the failure in the network.

Doverspike also does <u>not</u> teach adjusting the attributes of the released links on the restoration path.

In light of this, Applicant submits that Doverspike <u>fails</u> to teach or suggest all of the elements of claim 1. Claims 5-11, which depend upon claim 1, are <u>not</u> rendered obvious over the cited prior art reference. Applicant therefore respectfully requests the Examiner to reconsider and withdraw the rejection of claims 5-11 under 35 U.S.C. §103(a), and pass the claims to allowance.

<u>Rejection of Claim 13 under 35 U.S.C. §103</u>

Claim 13 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0097671 ("Doverspike") in view of U.S. Patent No. 6,735,393 ("Zouganeli"). Applicant respectfully traverses the rejection for the following reasons.

Claim 13 depends upon claim 1 and adds further limitations to claim 1. Zouganeli is cited by the Examiner to provide teachings for the limitations added in claim 13. Applicant respectfully submits that the combination of Doverspike and Zouganeli does <u>not</u> teach or suggest the steps of after recovery of the fault, releasing the links on the backup path, and adjusting the attributes for the released links along the backup path, as recited in claim 1.

Zouganeli teaches an optical network including passive wavelength routers. Zouganeli also teaches that different router configurations can be used in optical networks and the routing functionality in the optical network can be done in the optical domain without switching elements at the nodes. Zouganeli, however, does <u>not</u> teach a failure restoration in the network. Furthermore, Zouganeli does <u>not</u> teach releasing links on the restoration path after the recovery of the failure in the network, and adjusting the attributes of the released links on the restoration path, as recited in the claimed invention.

In light of this, Applicant submits that the combination of Doverspike and Zouganeli <u>fails</u> to teach or suggest all of the elements of claim 1. Claim 13, which depends upon claim 1, is <u>not</u> rendered obvious over the cited prior art references. Applicant therefore respectfully

requests the Examiner to reconsider and withdraw the rejection of claim 13 under 35 U.S.C. §103(a), and pass the claim to allowance.

Rejection of Claim 23 under 35 U.S.C. §103

Claim 23 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0097671 ("Doverspike") in view of U.S. Patent No. 5,636,203 ("Shah"). Applicant respectfully traverses the rejection for the following reasons.

Claim 23 depends upon claim 21 and adds further limitations to claim 21. Shah is cited by the Examiner to provide teachings for the limitations added in claim 23. Applicant respectfully submits that the combination of Doverspike and Shah does not teach or suggest the steps of *after recovery of the fault, releasing the links on the backup path, and adjusting the attributes for the released links along the backup path*, as recited in claim 21.

Shah teaches identifying fault locations in a communications network. In Shah, all nodes on a malfunctioned communications circuit of a communications network are enabled to identify the location of the fault causing the circuit malfunction. Shah, however, does not teach releasing links on the restoration path after the recovery of the failure in the network, and adjusting the attributes of the released links on the restoration path, as recited in the claimed invention.

In light of this, Applicant submits that the combination of Doverspike and Shah fails to teach or suggest all of the elements of claim 21. Claim 23, which depends upon claim 21, is not rendered obvious over the cited prior art references. Applicant therefore respectfully requests the Examiner to reconsider and withdraw the rejection of claim 23 under 35 U.S.C. §103(a), and pass the claim to allowance.

Rejection of Claim 25 under 35 U.S.C. §103

Claim 25 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0097671 ("Doverspike") in view of U.S. Patent No. 6,606,427 ("Graves"). Applicant respectfully traverses the rejection for the following

reasons.

Claim 25 depends upon claim 21 and adds further limitations to claim 21. Graves is cited by the Examiner to provide teachings for the limitations added in claim 25. Applicant respectfully submits that the combination of Doverspike and Graves does not teach or suggest the steps of *after recovery of the fault, releasing the links on the backup path, and adjusting the attributes for the released links along the backup path*, as recited in claim 21.

Graves teaches a cross-connect switch for switching optical signals, such as Dense Wavelength Division Multiplexed (DWDM) signals. Graves also teaches that the switch includes a switching matrix for each of the predetermined wavelengths of the DWDM signals. Graves, however, does not teach a failure restoration in the network. In particular, Graves does not teach releasing links on the restoration path after the recovery of the failure in the network, and adjusting the attributes of the released links on the restoration path, as recited in the claimed invention.

In light of this, Applicant submits that the combination of Doverspike and Graves fails to teach or suggest all of the elements of claim 21. Claim 25, which depends upon claim 21, is not rendered obvious over the cited prior art references. Applicant therefore respectfully requests the Examiner to reconsider and withdraw the rejection of claim 25 under 35 U.S.C. §103(a), and pass the claim to allowance.
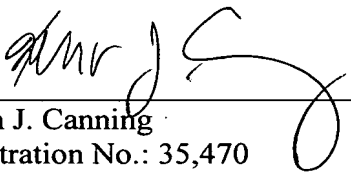
Conclusion

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. SYCS-060 from which the undersigned is authorized to draw.

Dated: October 4, 2005

Respectfully submitted,

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